

REMARKS/ARGUMENTS

Restriction Requirement under 35 U.S.C. §121

The claims have been restricted to the following four classifications:

- I. Claims 16 and 17, drawn to a fiber reinforced composite article.
- II. Claim 18, drawn to an insulating coating on an electric circuit.
- III. Claim 19, drawn to a process of producing a coated article.
- IV. Claims 20-25, drawn to a composition comprising a crosslinker and a cure inhibitor.

The above restriction requirement is respectfully traverse for the following reasons. Groups I and II both relate to electrical circuits and the claims should be able to be searched together without having to materially deviate from the general classifications of electric circuits. Accordingly, it is requested that Groups I and II be examined in the present application together.

If the Examiner maintains the restriction above as proper, then the Applicants hereby elect to prosecute the invention of Group I and the following species:

- (a) a diglycidyl ether of bisphenol A.
- (b) a complex of boric acid and 2-ethyl-4-methylimidazole.
- (c) a styrene-maleic anhydride copolymer.

Also, the absence of the bifunctional chain extender, accelerator and hydroxyl-functional crosslinker is elected.

Rejection under 35 U.S.C. §112

Claims 16 and 17 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In view of the amendments to the claims, it is urged that Claims 16 and 17 are now definite and the above rejection should be withdrawn.

The duplicate phrase "can be controllable adjust to extend the gel time of the resin" in Claim 16 lines 13-14 has been deleted and the repetitiveness of this phrase has been removed from the claims. Accordingly, Claims 16 and 17 are now definite.

The amount of crosslinker in Claims 16 and 17 has been clarified to provide a basis for that amount of crosslinker which is now based upon 100 parts of polyepoxide as described in Page 41, lines 4-10 of the Specification. Accordingly, the rejection under 35 U.S.C. §112, second paragraph, should be withdrawn.

Other Amendments to Claims

Claim 16 has been amended to include the language "a fiber reinforcing material" which finds support in the Specification, Page 42 lines 6-17. No new matter is added to the present application.

Rejection under 35 U.S.C. §103(a)

Claims 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over European Patent No. 458,502 (herein "EP '502") and PCT Publication No. 96/12751 (herein "the PCT Publication") in view of Schutyser, et al., U.S. Patent No. 5,821,305 (herein "Schutyser, et al.") and Japanese Patent Nos. 9-25349 (herein "JP '349") and 9-194610 (herein "JP '610") and Soviet Union Patent No. 448,742 (herein "SU '742"). In view of the amendments to the claims, Applicants hereby urge that the newly amended claims are now patentable over the cited references for the following reasons.

Firstly, the present invention is directed to a fiber reinforced composite article made with a novel and patentable composition. The novel composition was found to be patentable in the parent application Serial No. 09/00893, now U.S. Patent 6,613,839. The claims in the present divisional application are narrower than in the parent application since the claims are directed to an article using the novel composition. Thus the present claims should also be patentable.

Secondly, none of the cited prior art teaches all of the components of the novel epoxy resin composition used with the reinforcing material as now claimed in the present invention. For example, EP '502 does not teach or disclose the claimed crosslinker in the present composition. While EP '502 does disclose that "curing agents

known to the skilled artisan to react with polyepoxides (Page 11, lines 41-42)” include anhydrides (Page 11, lines 45 and 49 – 52), this broad definition of curing agents does not lead one skilled in the art to the specific crosslinkers now claimed in the amended claims pending in the present application. Not all curing agents behave the same.

The resultant cured system using a dicyandiamide, for example, has a much higher polarity than a system cured with an anhydride. Thus, a system curing with dicyandiamide will have a dielectric constant (Dk) higher than a system curing with an anhydride. One can not simply compare two cured agents side by side without changing the overall composition because the curing agents behave completely different in a particular composition and are not predictable.

The PCT Publication does not disclose the specific anhydride-vinyl compound crosslinker as pointed out by the Examiner.

Schutyser, et al., although teaches an SMA crosslinker, does not teach the other components of the claimed composition including the complex of a catalyst and the cure inhibitor.

JP ‘349 also does not disclose the claim composition including the specific crosslinker with the complex of a catalyst and cure inhibitor and polyepoxide.

JP ‘610 also does not teach the combined components of a polyepoxide, a complex of a catalyst and cure inhibitor, and the specific crosslinker in the specific amounts as now claimed in the amended claims pending in the application.

SU ‘742 also does not disclose to one of ordinary skill in the art the specific combination now claimed in the amended claims as pending in the patent application.

The Examiner has cited the above several references in combination to arrive at Applicants’ claimed composition. Each of the cited prior art references is missing one critical element of the combination composition of the pending claims. The Examiner has, with hindsight, taken bits and pieces from the prior art and put them together to arrive at Applicants’ invention. It is not obvious to one of ordinary skill in the art to simply put together all the elements found in the claim composition to arrive at the Applicants’ invention. The present invention lies in a very crowded field of electrical laminates with a multitude of different compositions that are used to make

electrical laminates. Some compositions improve the properties of electrical laminates and other compositions do not. However, no one prior to the Applicants have put together the specific combination of components now claimed to arrive at an electrical laminate composite having improved properties including, increase Tg and dielectric constant; and improved adhesion and thermal stability. It is always the goal of the industry to provide improved properties for laminates using various combinations of components. The Applicants have put together a specific combination that is not taught in the prior art. Accordingly, it is urged that Claims 16 and 17, as amended, are patentable over all the cited prior art references.

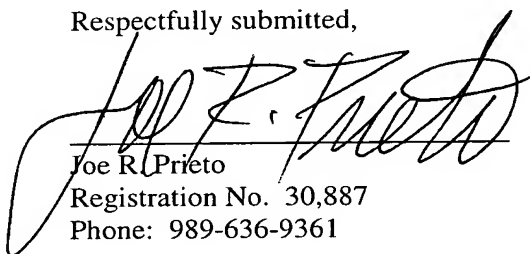
Claim 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schutyser, et al., JP '349 and JP '610 in view of EP '502 and the PCT Publication. For the same reasons described above, this combination of references does not make Claims 16 and 17 unpatentable. Again, it is not obvious to one skilled in the art to simply combine the complex catalyst and cure inhibitor at the appropriate molar ratios and with the amounts of the crosslinker to provide Applicants' invention as claimed. Applicants also urge that the declaration filed August 28, 2002, and the parent Application No. 09/008,983 and all the Examples in the present application do show that unexpected results occur with the specific combination claimed in the present application. The Examiner points out that the Examples only show the test of a blend of 2-ethyl-4-methylimidazole and boric acid whereas the claims are limited to a complex. It is known to one with skill in the art that the blend of 2-ethyl-4-methylimidazole and boric acid will form a complex, *in situ*, and therefore the Examples are commensurate in scope of the claims.

In addition, the Examiner points out that the claims embrace such diverse catalyst such as phosphonium complexes, ammonium complexes, mono-, di- and tri-alkyl monoamines, epoxy resin-amine adducts and imidazoles. Please note that it is well-established law that it is not necessary to include an example of every possible claim or component of an invention including for example every inhibitor, catalyst or crosslinker as now claimed. See case *In re Meier Strahilevitz*, 212 U.S PQ 561 (U.S.CC PA, 1982). Again, the Examiner points out that the mere testing of a single uncomplex mixture of methylimidazole and a boric acid does not indicate the

criticality of the broadly claimed catalyst-cure inhibitor complex. However, as stated above, the law does not require that an example of the invention be provided in order to show enablement; only that the invention is enabled by the teachings of the patent application.

In view of the above, Applicants urge that the Claims, as now amended, are patentably distinct over the cited prior art. Applicants respectfully request reconsideration of the rejections and that an early notice of allowance be issued in the present application.

Respectfully submitted,



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